

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-40 (canceled).

41. (currently amended): ~~The pulse laser system as claimed in claim 4, wherein said filter is disposed before said stretcher, and said system comprises an attenuator module disposed between said signal source and said stretcher, said attenuator controlling an amplitude of pulses emitted from said source so as to prevent non-linear effects within said stretcher from altering a pulse spectrum.~~ A pulsed laser system, comprising:

_____ a signal source;

_____ a stretcher temporally stretching an output of said source;

_____ a fiber amplifier;

_____ a compressor recompressing an output of said amplifier;

_____ an AOM selecting output pulses from said amplifier; wherein each of said signal source, said stretcher, said fiber amplifier, said AOM and said compressor comprise a pre-tested module, and said system is configured with at least said signal source, said stretcher, said fiber amplifier and said AOM optically connected via fiber splices;

_____ at least one tap unit within or between ones of said modules, including means for picking off a portion of said signal for measurement of a spectrum within or between said modules;

_____ at least one spectral filter, said at least one spectral filter being disposed external to said signal source and said fiber amplifier, and either before or after said stretcher, said filter having

a wavelength sensitive characteristic that modifies a spectral shape of an output from said signal source and narrows the spectrum of the signal source output, wherein at least one of said tap units is located downstream of said filter and configured to enable measurement of said narrowed spectrum, and wherein said filter is disposed before said stretcher, and
an attenuator module disposed between said signal source and said stretcher, said attenuator controlling an amplitude of a pulse emitted from said source so as to prevent non-linear effects within said stretcher from altering the pulse spectrum.

42. (previously presented): The pulsed laser system as claimed in claim 41, wherein said filter is packaged within a filter-attenuator (F1/Attn) module.

43. (new): The pulsed laser system as claimed in claim 41, wherein said at least one tap unit provides a small signal output to a diagnostic means, said signal output being provided during manufacturing or service of said pulsed laser system.

44. (new): The pulsed laser system as claimed in claim 41, wherein said signal source comprises a fiber oscillator, and said at least one tap unit provides a small signal output for measurement of said oscillator spectrum.

45. (new): The pulsed laser system as claimed in claim 41, further comprising: at least one isolator module between said signal source and said fiber amplifier for providing at least 35 dB isolation therebetween.

46. (new): The pulsed laser system as claimed in claim 41, wherein said at least one tap unit provides a small signal output representative of pump power from a pump diode source, said small signal output providing an input for a feedback loop to regulate the pump diode source.

47. (new) A pulsed laser system, comprising:

a signal source;

a stretcher temporally stretching an output of said source;

a fiber amplifier;

a compressor recompressing an output of said amplifier;

an AOM selecting output pulses from said amplifier; wherein each of said signal source, said stretcher, said fiber amplifier, said AOM and said compressor comprise a pre-tested module, and said system is configured with at least said signal source, said stretcher, said fiber amplifier and said AOM optically connected via fiber splices;

at least one tap unit within or between ones of said modules, including means for picking off a portion of said signal, wherein said at least one tap unit provides a small signal output to a diagnostic means, said signal output being provided during manufacturing or service of said pulsed laser system;

at least one spectral filter, said at least one spectral filter being disposed external to said signal source and said fiber amplifier, and either before or after said stretcher, said filter having a wavelength sensitive characteristic that modifies a spectral shape of an output from said signal source and narrows the spectrum of the signal source output, wherein at least one of said tap units is located downstream of said filter and configured to enable measurement of said narrowed spectrum, and wherein said filter is disposed before said stretcher, and

an attenuator module disposed between said signal source and said stretcher, said attenuator controlling an amplitude of a pulse emitted from said source so as to prevent non-linear effects within said stretcher from altering the pulse spectrum.

48. (new) The pulsed laser system as claimed in claim 47, wherein said small signal output is representative of a signal spectrum within or between said modules,

49. (new) The pulsed laser system as claimed in claim 47, wherein said at least one tap unit provides a small signal output representative of pump power from a pump diode source, said small signal output providing an input for a feedback loop to regulate the pump diode source.